

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
Kevin J. Elsken	PO-8044/MD-02-39	8269	
157 7590 01/17/2006 BAYER MATERIAL SCIENCE LLC		EXAMINER	
		COONEY, JOHN M	
	ART UNIT	PAPER NUMBER	
	1711		
,	Kevin J. Elsken	Kevin J. Elsken PO-8044/MD-02-39  EXAM  COONEY,  ART UNIT	

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

,			
	Application No.	Applicant(s)	
	10/749,027	ELSKEN ET AL.	
Office Action Summary	Examiner	Art Unit	
	John m. Cooney	1711	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  36(a). In no event, however, may a reply be the string and will expire SIX (6) MONTHS from the cause the application to become ABANDON	N. imely filed not be a subject to the mailing date of this communication. ED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 21 Oc	ctober 2005.		
	action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims			
4) ☐ Claim(s) 1-48 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-48 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.		
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the drawing(s) be held in abeyance. So ion is required if the drawing(s) is o	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>			
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 0805.	4) Interview Summar Paper No(s)/Mail I 5) Notice of Informal 6) Other:		

Application/Control Number: 10/749,027

Art Unit: 1711

Applicant's arguments filed 10-21-05 have been fully considered but they are not persuasive.

Rejections are addressed under headings below.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Schilling et al.(6,846,850), and Schilling (6,423,759), each taken individually.

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

Application/Control Number: 10/749,027

Art Unit: 1711

the reference was derived from the inventor of this application and is thus not the

invention "by another," or by an appropriate showing under 37 CFR 1.131.

Patentees disclose preparations of polyurethane foams which are prepared from polyisocyanates, polyol mixtures of the specificity claimed by applicants, 1,1,1,3,3-pentafluoropropane(HFC-245fa), and water (see each of the documents in their entirety). Each of the patents' disclosures is teaching of the instant polyol components and mixtures, HFC-245fa, and water to a degree that anticipation of applicants' combinations and their amounts is seen to be evident. The specific K-values of applicants' claims, though not particularly specified, are held to be inherent to the

Applicants' arguments regarding the previous rejections set forth again above, and the rejection over Doerge et al.(6,562,880), now withdrawn, are addressed below.

teachings of each of the patents owing to the similarities in the materials employed.

Rejection over Doerge et al.(6,562,880) is withdrawn in light of applicants' affidavit showing that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another".

Rejection over Schilling et al.(6,846,850) is maintained because the affidavit evidence signed by Doerge, not a named inventor in the 6,846,850 patent, does not sufficiently show that the relevant disclosure is applicants' own work and that the

invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another".

Page 4

Rejection over Schilling et al.(6,423,759) is maintained for the reasons set forth above. Schilling et al.'s teaching is not limited by its examples. Schilling et al.'s teaching particularly is directed preferentially to higher contents of amine initiated polyol (see column 3 lines 53-61) to an extent that anticipation of the claims is maintained to be evident.

Claims 1-48 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 03/089,505.

WO 03/089,505 discloses preparations of polyurethane foams which are prepared from polyisocyanates, polyol mixtures of the specificity claimed by applicants, 1,1,1,3,3-pentafluoropropane(HFC-245fa), and water (see the entire document). WO 03/089,505's disclosure teaches the instant polyol components and mixtures, HFC-245fa, and water to a degree that anticipation of applicants' combinations and their amounts is seen to be evident. The specific K-values of applicants' claims, though not particularly specified, are held to be inherent to the teachings of WO 03/089,505 based on the make-up of the materials employed.

Rejection under 35 USC 102(b) over Lund et al. is hereby withdrawn upon further consideration. However, the following new rejections under 35 USC 103 are set forth hereinbelow.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lund et al.(5,688,833).

Lund et al. disclose preparations of polyurethane foams having lowered K-factors, superior performance and dimensional stability which are prepared from polyisocyanates, polyol mixtures of the specificity claimed by applicants, 1,1,1,3,3-pentafluoropropane(HFC-245fa), and water (see column 1 lines 47-57, column 2 lines 10-25, column 3 lines 24 et seq., column 4 lines 15-24,and column 5 lines 6-29, as well as, the entire document). Lund et al. discloses employment of aromatic amine initiated polyols as the sole polyol and therefore difference based on the polyol component make-up is not seen for claims 1, 3-8, 25, and 27-32.

Lund et al. differs from applicants' claims in that it does not particularly recite specific ranges of amount values for its blends of polyol components. However, Lund et al. recites the employment of the specific polyols set forth in applicants' claims for the purpose of imparting their isocyanate reactive effects (see column 3 line 53 - column 4 line 23). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed combinations of the polyols of Lund et al. in varied amounts within the teachings of Lund et al. for the purpose of imparting their isocyanate reactive effect in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find *workable* conditions generally involves nor more than the application of routine skill in the art of chemical engineering. *In re Aller* 105 USPQ 233. Similarly, the determination of *optimal* values within a disclosed set of ranges is generally considered obvious. *In re Boesch* 205 USPQ 215.

Lund et al. differs from applicants' claims in that the amounts of HFC-245fa employed are not particularly limited to the ranges of values set forth by applicants' claims. However, Lund et al. discloses variation in the amounts of its HFC-245fa blowing agent for the purpose of controlling densities. Accordingly, it would have been obvious for one having ordinary skill in the art to have varied amounts of the HFC-245fa within the teachings of Lund et al. for the purpose of controlling densities in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Again, changes in

Application/Control Number: 10/749,027

Art Unit: 1711

result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find *workable* conditions generally involves nor more than the application of routine skill in the art of chemical engineering. *In re Aller* 105 USPQ 233. Similarly, the determination of *optimal* values within a disclosed set of ranges is generally considered obvious. *In re Boesch* 205 USPQ 215.

Applicants' arguments regarding Lund et al. are moot in light of the new grounds of rejection set forth in this Office action.

Claims 1, 3-8, 25, and 27-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP-0,822,171.

EP-0,822,171 disclose preparations of polyurethane foams which are prepared from aromatic amine initiated polyether polyols, polyisocyanates, and 1,1,1,3,3-pentafluoropropane(HFC-245fa)(see examples 20-38 as well as, the entire document).

EP-0,822,171 differs from applicants' claims in that the amounts of HFC-245fa employed are not particularly limited to the ranges of values set forth by applicants' claims. However, EP-0,822,171 discloses employment of HFC-245fa in foaming compositions for the purpose of imparting its blowing effect. Accordingly, it would have been obvious for one having ordinary skill in the art to have varied amounts of the HFC-245fa within the teachings of EP-0,822,171 for the purpose of controlling foaming degrees within the products obtained in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or

unexpected results. Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find workable conditions generally involves nor more than the application of routine skill in the art of chemical engineering. *In re Aller* 105 USPQ 233. Similarly, the determination of *optimal* values within a disclosed set of ranges is generally considered obvious. *In re Boesch* 205 USPQ 215.

The following rejections are set forth in the alternative to the above rejections under 35 USC 102(e) over Schilling et al.(6,846,850) & (6,423,759).

Claims 1-48 are rejected under 35 U.S.C. 103(a) as being obvious over Schilling et al.(6,846,850) & (6,423,759), each taken individually.

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR

1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Schilling et al. each disclose preparations of polyurethane foams based on mixing and reacting isocyanates, polyol premixes as claimed, HFC-245fa, and auxiliaries and additive (see the documents in their entirety).

The Schilling et al. documents differ from applicants' claims in that they do not particularly recite the specific ranges of amount values as claimed by applicants for their blends of polyol components. However, the Schilling et al. documents do recite the employment of the specific polyols set forth in applicants' claims for the purpose of imparting their isocyanate reactive effects. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed combinations of the polyols of the Schilling et al. documents in varied amounts within the teachings of the Schilling et al. documents for the purpose of imparting their isocyanate reactive effect in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find *workable* conditions generally involves nor more than the application of routine skill in the art of chemical engineering. *In re Aller* 105

USPQ 233. Similarly, the determination of *optimal* values within a disclosed set of ranges is generally considered obvious. *In re Boesch* 205 USPQ 215.

## **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

The obviousness-type Double Patenting rejection over US Patent # 6,423,759 is withdrawn in of applicants' properly filed Terminal Disclaimer.

Claims 1-48 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,846,850 and claims 1-14 of U.S. Patent No. 6,562,880, each taken individually.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims and the teaching effects of the supporting disclosure

disclose preparations of polyurethane foams which are prepared from polyisocyanates, polyol mixtures of polyethers and polyesters, 1,1,1,3,3-pentafluoropropane(HFC-245fa), and water wherein it would have been obvious for one having ordinary skill in the art to have varied the combinations and their respective amounts within the claims of the patents with expectation of success in order to arrive at the products and processes of applicants' claims in the absence of a showing of new or unexpected results.

Rejections are maintained because the Terminal Disclaimers referred to are not of record. Applicants need to resubmit copies of the previously submitted Terminal Disclaimer or, in the unlikely event they were not already submitted, submit them now.

Claims 1-48 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1,2,5,8, and 11-13 of copending Application No. 10/894,692, claims 1-9 of copending Application No. 10/965,349, claims 1-24 of copending Application No. 10/281,733, claims 1-8 of copending Application No. 10/295,315, each taken individually. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims and the teaching effects of the supporting disclosure disclose preparations of polyurethane foams which are prepared from polyisocyanates, polyol mixtures of polyethers and polyesters, 1,1,1,3,3-pentafluoropropane(HFC-245fa), and water wherein it would have been obvious for one having ordinary skill in the art to have varied the combinations and their respective amounts within the claims of the

Application/Control Number: 10/749,027 Page 12

Art Unit: 1711

applications with the expectation of success in order to arrive at the products and processes of applicants' claims in the absence of a showing of new or unexpected results.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The above provisional rejections are maintained as set forth above. Applicants' suggested and intended address to these rejections is appropriate and acceptable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JOHN M. COONEY, JR. PRIMARY EXAMINER